FIG. 1

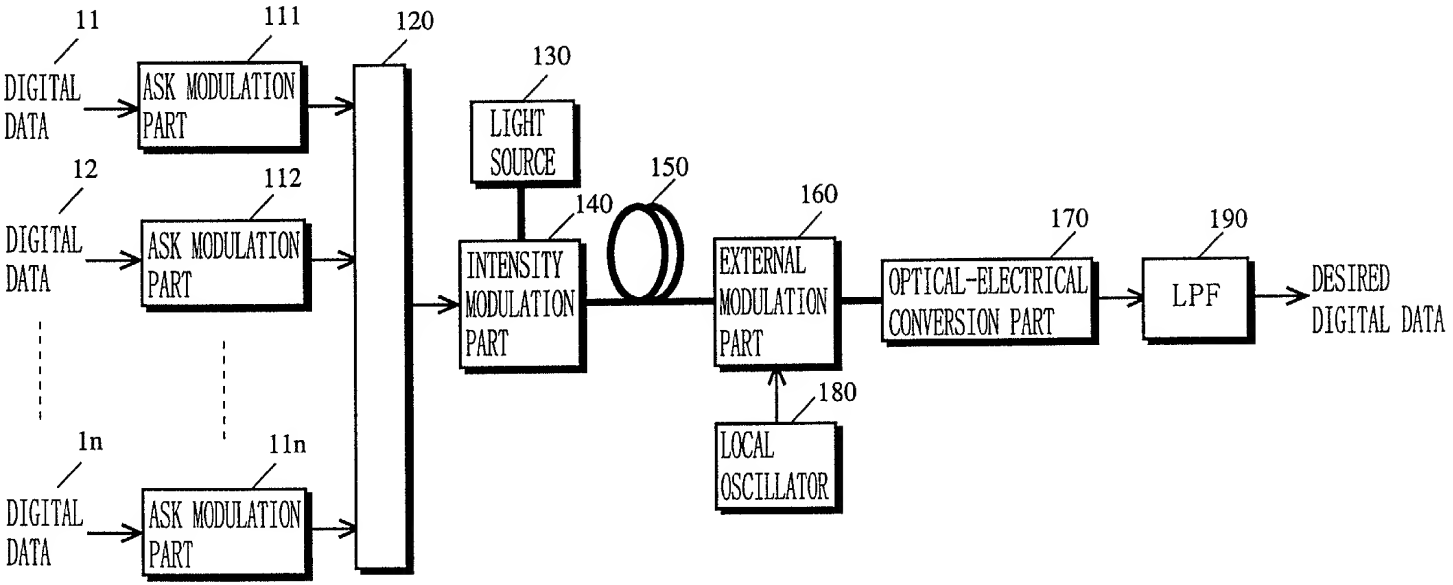

11
111
120
DIGITAL DATA
ASK MODULATION PART
130
LIGHT SOURCE
12
112
150
140
160
170
190
DIGITAL DATA
ASK MODULATION PART
INTENSITY MODULATION PART
EXTERNAL MODULATION PART
OPTICAL-ELECTRICAL CONVERSION PART
LPF
DESIRED DIGITAL DATA
1n
11n
180
DIGITAL DATA
ASK MODULATION PART
LOCAL OSCILLATOR

FIG. 2

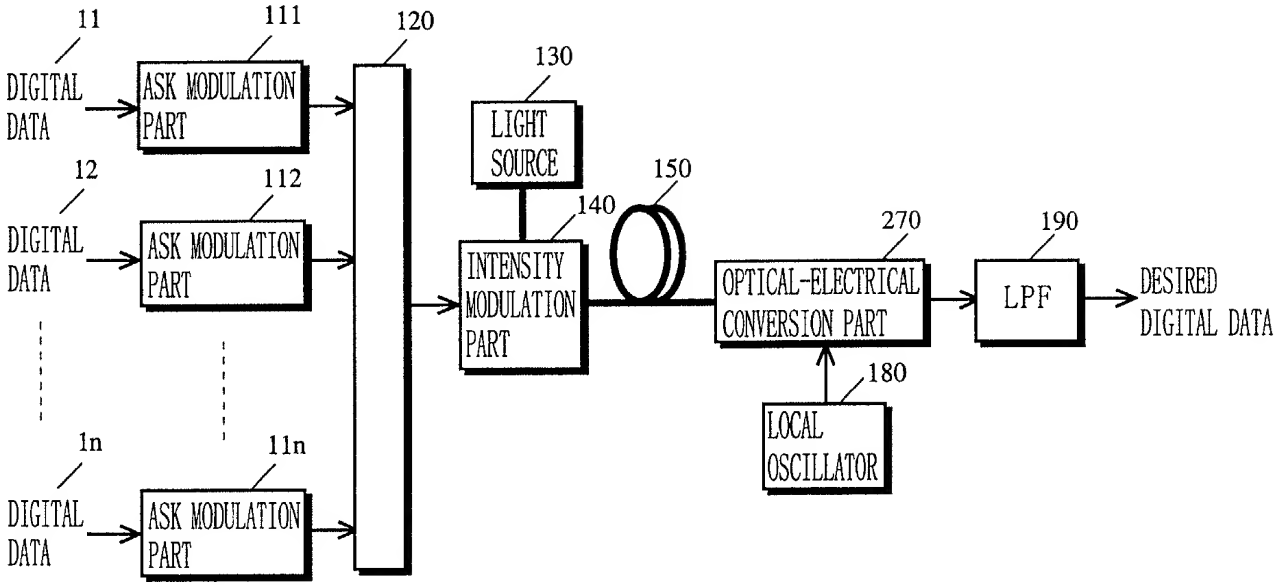

11
111
120
130
DIGITAL DATA
ASK MODULATION PART
LIGHT SOURCE
12
112
150
140
270
190
DIGITAL DATA
ASK MODULATION PART
INTENSITY MODULATION PART
OPTICAL-ELECTRICAL CONVERSION PART
LPF
DESIRED DIGITAL DATA
180
LOCAL OSCILLATOR
1n
11n
DIGITAL DATA
ASK MODULATION PART

FIG. 3

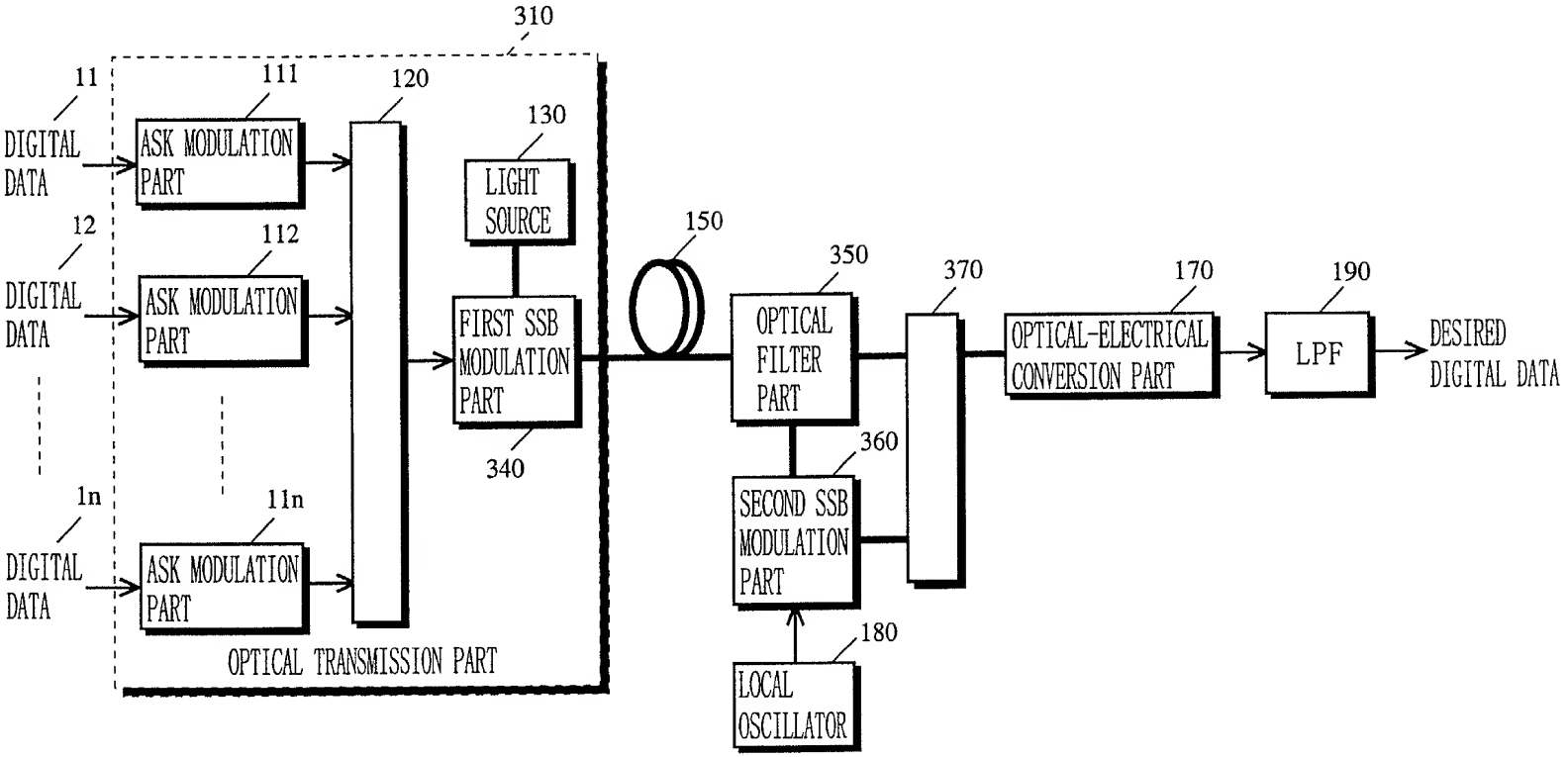

310
11
DIGITAL DATA
111
ASK MODULATION PART
120
130
LIGHT SOURCE
12
DIGITAL DATA
112
ASK MODULATION PART
150
350
370
170
190
FIRST SSB MODULATION PART
340
OPTICAL FILTER PART
OPTICAL-ELECTRICAL CONVERSION PART
LPF
DESIRED DIGITAL DATA
360
1n
DIGITAL DATA
11n
ASK MODULATION PART
SECOND SSB MODULATION PART
180
LOCAL OSCILLATOR
OPTICAL TRANSMISSION PART

FIG. 4a

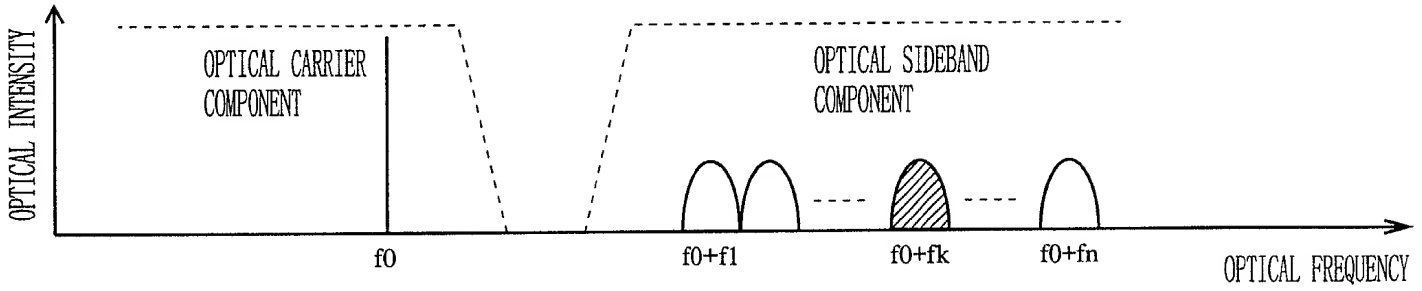


FIG. 4b

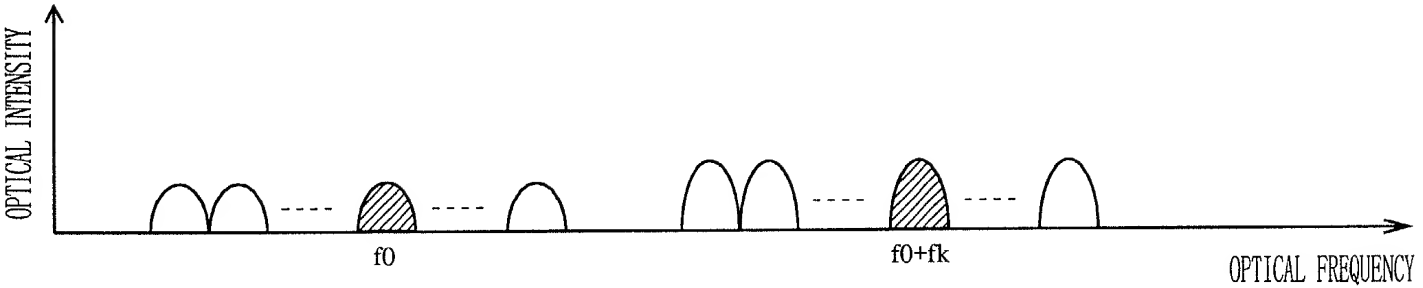


FIG. 4c

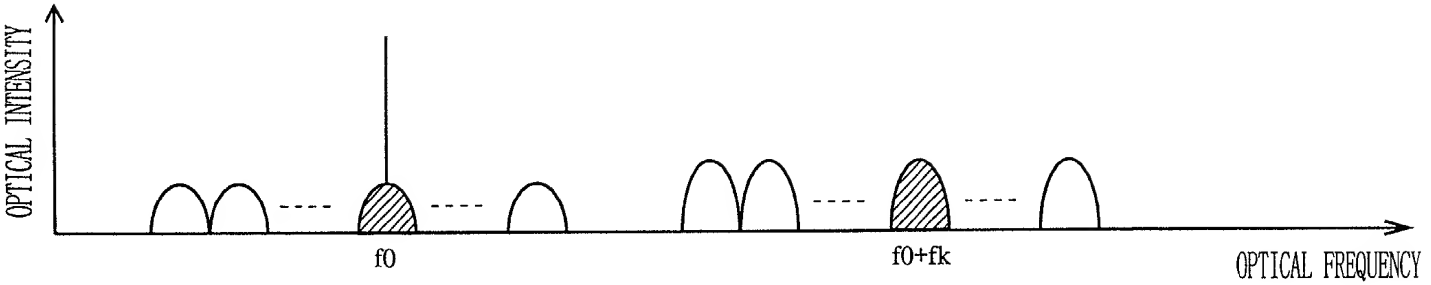


FIG. 5

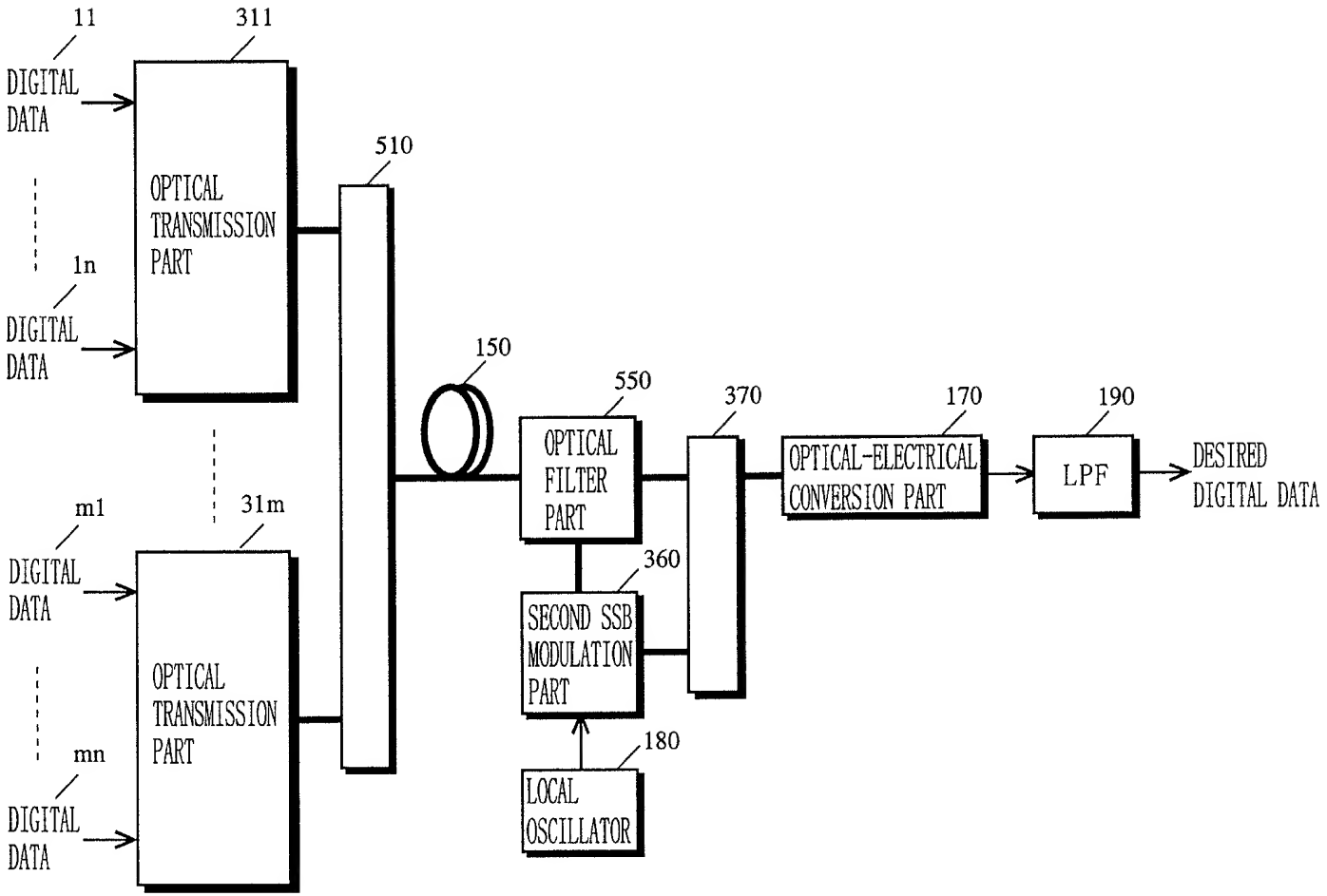
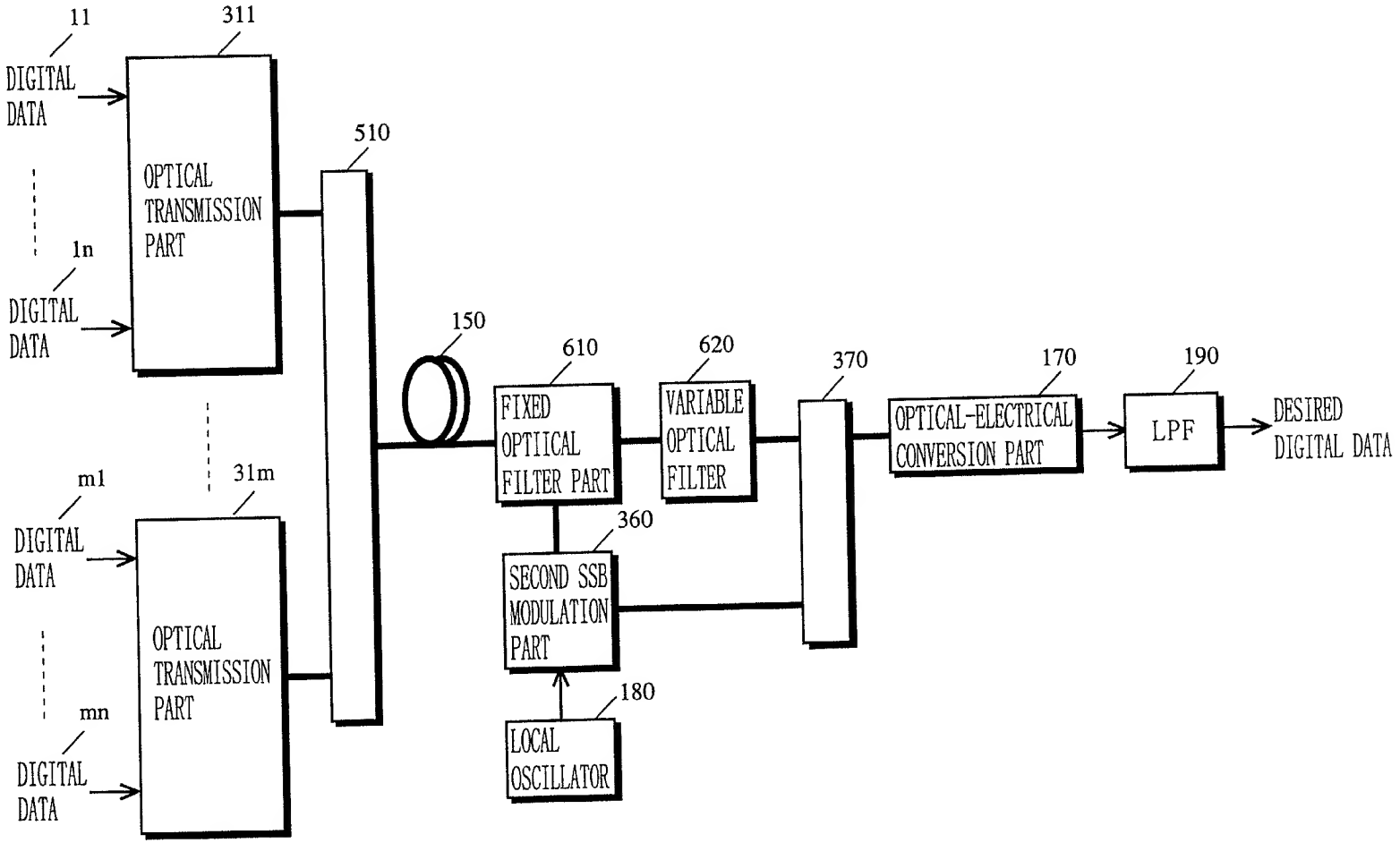

11
311
DIGITAL DATA
OPTICAL TRANSMISSION PART
1n
DIGITAL DATA
510
150
550
370
170
190
OPTICAL FILTER PART
OPTICAL-ELECTRICAL CONVERSION PART
LPF
DESIRED DIGITAL DATA
m1
31m
DIGITAL DATA
OPTICAL TRANSMISSION PART
360
SECOND SSB MODULATION PART
mn
DIGITAL DATA
180
LOCAL OSCILLATOR

FIG. 6


11
311
DIGITAL DATA
OPTICAL TRANSMISSION PART
1n
DIGITAL DATA
510
150
610
620
370
170
190
FIXED OPTIICAL FILTER PART
VARIABLE OPTICAL FILTER
OPTICAL-ELECTRICAL CONVERSION PART
LPF
DESIRED DIGITAL DATA
m1
31m
DIGITAL DATA
OPTICAL TRANSMISSION PART
360
SECOND SSB MODULATION PART
mn
DIGITAL DATA
180
LOCAL OSCILLATOR

0012ET-ETA0h259

FIG. 7a

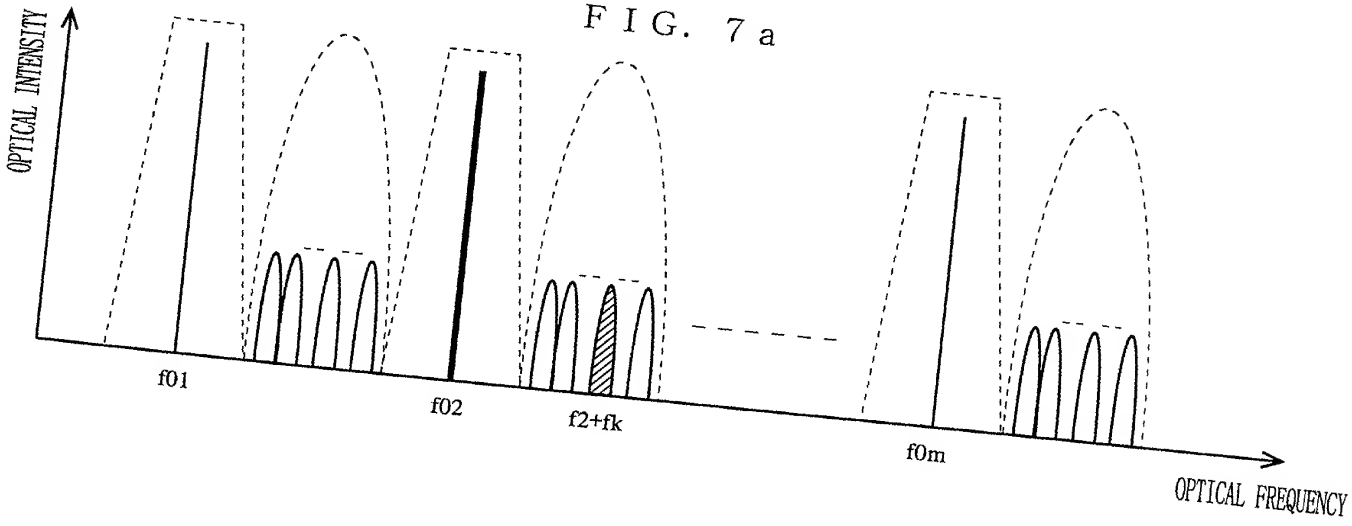
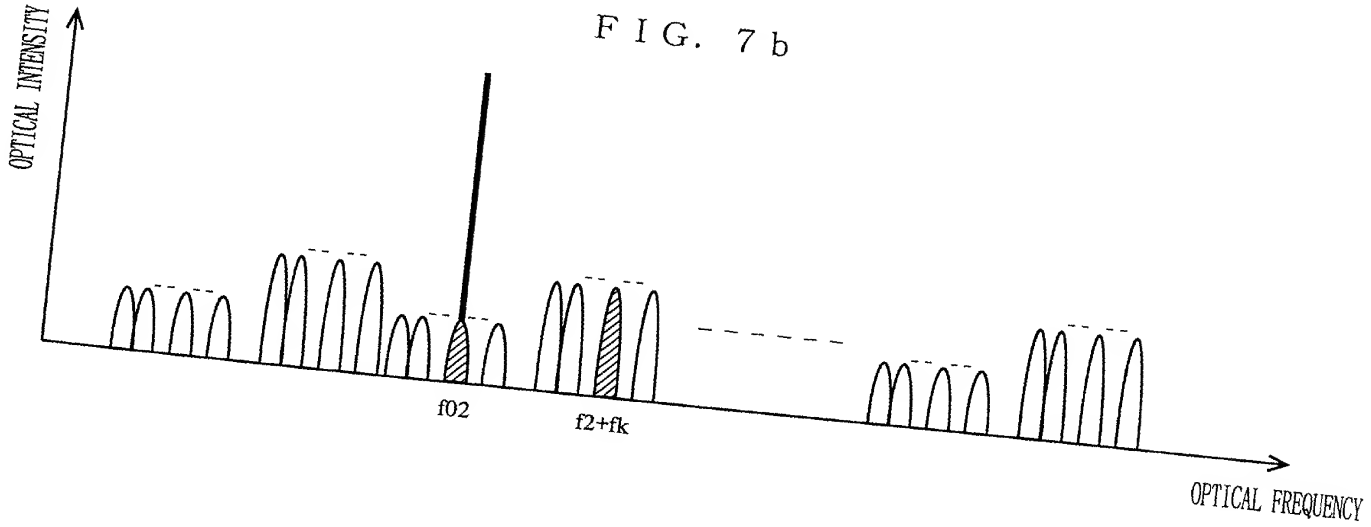


FIG. 7b



00T22T "ET80h460

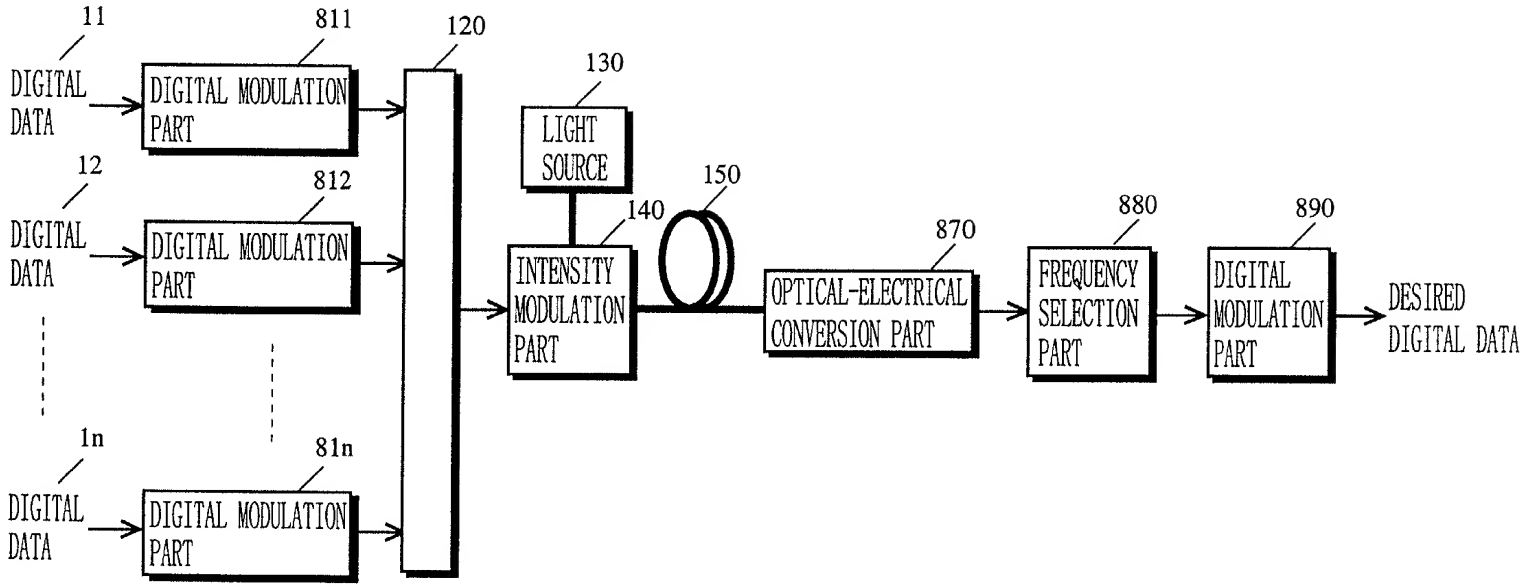



FIG. 8 PRIOR ART